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PILLSBURY WINTHROP LLP  
1600 TYSONS BOULEVARD  
MCLEAN, VA 22102

EXAMINER

MEINECKE DIAZ, SUSANNA M

ART UNIT	PAPER NUMBER
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3623

18

DATE MAILED: 06/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/819,827

Applicant(s)

KAKIHARA ET AL.

Examiner

Susanna M. Diaz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 March 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 and 10-33 is/are pending in the application.
- 4a) Of the above claim(s) 23-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-22 and 33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All   b) ☐ Some \*   c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 15.                      6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. This Final Office action is responsive to Applicant's amendment filed March 5, 2003.

Claims 1, 3, 4, 7, 8, 10-12, 14, 17, 18, and 20-22 have been amended.

Claim 9 has been cancelled.

Claim 33 has been added.

Claims 23-32 stand as non-elected claims and are therefore withdrawn from consideration.

Claims 1-8, 10-22, and 33 are presented for examination.

2. The previously pending objection to the declaration is withdrawn in response to Applicant's persuasive argument.

The previously pending objection to the abstract is withdrawn in response to Applicant's amendment of the abstract.

The previously pending objection to the specification regarding page numbering is maintained because Applicant failed to submit a marked-up copy with the clean copy of the substitute specification. The substitute specification cannot be entered until a marked-up copy is submitted as well.

The previously pending claim objections are withdrawn in response to Applicant's amendment of the claims.

All previously pending rejections under 35 U.S.C. 112, 2<sup>nd</sup> paragraph (except for the issue regarding lack of antecedent basis for "the buffer areas" in claim 14) are

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withdrawn in response to Applicant's amendment of the claims. Applicant has not yet addressed the issue regarding lack of antecedent basis for "the buffer areas" in claim 14; therefore, said rejection is maintained.

### ***Response to Arguments***

3. Applicant's arguments filed March 5, 2003 have been fully considered but they are not persuasive.

Applicant argues:

The Examiner points out in Widi [sic] there is a free road next to a Turnpike (toll road) and that this is analogous to our buffer area. It appears to Applicant that Widi [sic] discloses including an ***additional point*** in the charging area and erasing the results whether the additional point is passed or not. According to Widi [sic], characteristics other than the area, detailed information on the free area, and the like are required.

In our claimed inventions, the buffer area is set at a boundary of a charging area. Charging information is generated whether the vehicle is in the buffer area or not. Characteristics other than the area, detailed information on the free area, and the like are not required due our defining a physical buffer area with respect to each charging area. (Pages 12-13 of Applicant's Response)

The Examiner respectfully disagrees. The claimed invention recites "wherein, when a history of the entry state is one in which the moving body moves from the charge applicable area to the buffer area and then back to the same charge applicable area again, generating of charge information relating to an entry into the charge applicable area is prohibited in the generating means" (claim 1). This limitation is interpreted as meaning that, when a vehicle temporarily passes through a buffer area

but subsequently returns to the charge area, a toll is charged as if the vehicle had not exited and re-entered the charge area (i.e., the vehicle is not double charged for the same toll area). Widl teaches such a feature in column 3, lines 45-65 and column 4, lines 18-46. When a vehicle enters a buffer area, e.g., an area where toll and non-toll roads cross, the vehicle is assumed to have remained on the toll road the entire time if it moves from the toll area to the buffer area and subsequently back to the same toll area; therefore, no extra entry and exit fees would be charged. The fact that Widl may require "characteristics other than the area, detailed information on the free area, and the like" to make a charge determination when crossing a buffer zone, as asserted by the Applicant, are irrelevant since Applicant's claim language does not preclude such a scenario.

Applicant's argument is deemed to be non-persuasive. All pending objections and rejections are found below.

### ***Specification***

4. The disclosure is objected to because the pages of the specification including claims and abstract must be numbered consecutively, starting with 1, the numbers being centrally located above or preferably, below, the text (see 37 C.F.R. § 1.51). In the instant application, the following pages do not conform to the proper numbering format: pages 119/1, 129/1, 137/1, 145/1, 153/1, 160/1, 169/1, 172/1, 186/1, and 237/1.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 14-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14 recites the limitation "the buffer areas" in line 12. There is insufficient antecedent basis for this limitation in the claim. For examination purposes, "the buffer areas" will be interpreted as "the buffer area."

Claims 15-20 are dependent from claim 14 and therefore inherit the same rejection under 35 U.S.C. 112, 2<sup>nd</sup> paragraph.

Appropriate correction and/or clarification is required.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

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8. Claims 1-3, 10, 12, 14-22, and 33 are rejected under 35 U.S.C. 102(e) as being anticipated by Widl (U.S. Patent No. 5,721,678).

Widl discloses a charging device comprising:

[Claim 1] detecting means for detecting position information specifying the position of a moving body (col. 3, lines 14-65);

deciding means for determining a charge applicable area in predetermined map information and for determining a buffer area at a boundary between the charge applicable area and an area other than the charge applicable area, and matching the map information with the position information, and deciding an entry state indicating whether or not the moving body has at least entered into one of the charge applicable area or the buffer (col. 2, lines 31-63; col. 4, lines 21-28 – The fact that the vehicle's position is compared to geographical information in a database to determine whether or not the vehicle's location corresponds to a toll zone, i.e., a charge applicable area, signifies that the stored geographical information is equivalent to the claimed predetermined map information; col. 4, lines 18-46 – An area where a toll zone crosses a non-toll zone, e.g., at an area where there is a highway overpass and only one of the cross roads is a toll road, is a type of buffer area. In a buffer area, more location information is needed before it is decided whether or not the vehicle is traveling in a toll zone); and

generating means for generating charging information for the moving body based on a result of a decision by the deciding means (col. 2, lines 59-63; col. 4, lines 18-67; col. 5, lines 25-34), wherein, when a history of the entry state is one in which the moving

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body moves from the charge applicable area to the buffer area and then back to the same charge applicable area again, generating of charge information relating to an entry into the charge applicable area is prohibited in the generating means (col. 3, lines 45-65; col. 4, lines 18-46 – When a vehicle enters a buffer area, e.g., an area where toll and non-toll roads cross, the vehicle is assumed to have remained on the toll road the entire time if it moves from the toll area to the buffer area and subsequently back to the same toll area; therefore, no extra entry and exit fees would be charged);

[Claim 2] wherein the generating means is provided with storage means in which toll data that is determined in advance and corresponds to the entry state is stored in advance, and the charge information is generated using toll data of the storage means (col. 4, line 57 through col. 5, line 24);

[Claim 3] wherein the buffer area is located between the toll area and the non-toll area (col. 4, lines 18-46 – An area where a toll zone crosses a non-toll zone, e.g., at an area where there is a highway overpass and only one of the cross roads is a toll road, is a type of buffer area. In a buffer area, more location information is needed before it is decided whether or not the vehicle is traveling in a toll zone);

[Claim 10] wherein the generating means generates charge information relating to tolls determined based on a distance traveled in the charge applicable area (col. 5, lines 25-28).

Widl discloses a charging device, comprising:

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[Claim 12] host moving body position detecting means for detecting a position of a host moving body (col. 3, lines 14-65);

storage means for storing data useful for determining charges to be rendered including predetermined map information, charge applicable areas, buffer areas that may be at boundaries between the charge applicable areas and areas other than the charge applicable areas or between different charge applicable areas (col. 2, lines 31-63; col. 4, lines 21-28 – The fact that the vehicle's position is compared to geographical information in a database to determine whether or not the vehicle's location corresponds to a toll zone, i.e., a charge applicable area, signifies that the stored geographical information is equivalent to the claimed predetermined map information; col. 4, lines 18-46 – An area where a toll zone crosses a non-toll zone, e.g., at an area where there is a highway overpass and only one of the cross roads is a toll road, is a type of buffer area. In a buffer area, more location information is needed before it is decided whether or not the vehicle is traveling in a toll zone);

determining means for receiving position information and relating it to map information, and for determining whether or not the moving body has at least entered one of the charge applicable area and the buffer area (col. 2, lines 31-63; col. 4, lines 21-28 – The fact that the vehicle's position is compared to geographical information in a database to determine whether or not the vehicle's location corresponds to a toll zone, i.e., a charge applicable area, signifies that the stored geographical information is equivalent to the claimed predetermined map information); and

charge processing means for performing charge processing for a host moving body relating to the charge applicable area based on a result of a determination by the determining means (col. 2, lines 59-63; col. 4, lines 18-67; col. 5, lines 25-34).

Widl discloses a charging device, comprising:

[Claim 14] detecting means for detecting position information defining the position of a moving body (col. 3, lines 14-65);

adding means for defining a buffer area in which a moving body may be expected to move to from a detected position based on position information concerning the detected moving body, and adding a predetermined area to the position information (col. 3, lines 45-50 – Dead reckoning is a technique for estimating the expected position of a moving body based on a last known position and details of direction and velocity of travel at that last known position. The area of expected movement can be interpreted as a buffer area; col. 4, lines 18-46 – An area where a toll zone crosses a non-toll zone, e.g., at an area where there is a highway overpass and only one of the cross roads is a toll road, is a type of buffer area. In a buffer area, more location information is needed before it is decided whether or not the vehicle is traveling in a toll zone. This excerpt provides an alternate interpretation of a buffer area);

deciding means for identifying charge applicable areas based on predetermined map information, for matching the position information to the map information, and for deciding an entry state indicating whether or not the moving body has at least entered a charge applicable area based on the charge applicable areas and the buffer areas (col.

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2, lines 31-63; col. 4, lines 21-28 – The fact that the vehicle's position is compared to geographical information in a database to determine whether or not the vehicle's location corresponds to a toll zone, i.e., a charge applicable area, signifies that the stored geographical information is equivalent to the claimed predetermined map information; col. 4, lines 18-46 – An area where a toll zone crosses a non-toll zone, e.g., at an area where there is a highway overpass and only one of the cross roads is a toll road, is a type of buffer zone. In a buffer zone, more location information is needed before it is decided whether or not the vehicle is traveling in a toll zone); and

generating means for generating charge information based on a result of a decision by the deciding means (col. 2, lines 59-63; col. 4, lines 18-67; col. 5, lines 25-34);

[Claim 15] wherein the generating means is provided with storage means in which toll data that is determined in advance and corresponds to the entry state is stored in advance, and the charge information is generated using toll data of the storage means (col. 4, line 57 through col. 5, line 24);

[Claim 16] wherein the detecting means detects position information concerning a moving body based on satellite data from a position finding satellite (col. 3, lines 14-31);

[Claim 17] wherein the adding means sets the size of a buffer area based on a detection error by the detecting means (col. 3, lines 45-50 – Dead reckoning is a technique for estimating the expected position of a moving body based on a last known position and details of direction and velocity of travel at that last known position. The area of expected movement can be interpreted as a buffer area; col. 4, lines 18-46 – An



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area where a toll zone crosses a non-toll zone, e.g., at an area where there is a highway overpass and only one of the cross roads is a toll road, is a type of buffer area. In a buffer area, more location information is needed before it is decided whether or not the vehicle is traveling in a toll zone. This excerpt provides an alternate interpretation of a buffer area; col. 3, lines 45-65; col. 4, lines 18-46 – Taking into account Widl's invention as a whole, a toll charge is only applied when it is certain that a vehicle is located in a toll area. Further, dead reckoning is used to estimate the position of a vehicle while the position detection system is temporarily malfunctioning "due to shielding effects or unfavorable satellite position; therefore, Widl's invention teaches the setting of the size of a buffer area based on a detection error by the detecting means since it refrains from charging a toll until the detection error is deemed to be overcome, i.e., "if the agreement between the position data is sufficiently exact" (col. 3, lines 60-61));

[Claim 18] wherein the detecting means includes estimating means for estimated position information concerning a moving body based on at least one of a direction in which the moving body is traveling and a distance traveled by the moving body information (col. 3, lines 45-50 – Dead reckoning is a technique for estimating the expected position of a moving body based on a last known position and details of direction and velocity of travel at that last known position);

[Claim 19] wherein the adding means sets the size of a buffer area based on at least one of a direction in which the moving body is traveling and a distance traveled by the moving body used in the estimating means (col. 3, lines 45-50 – Dead reckoning is a

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technique for estimating the expected position of a moving body based on a last known position and details of direction and velocity of travel at that last known position. The area of expected movement can be interpreted as a buffer area; col. 4, lines 18-46 – An area where a toll zone crosses a non-toll zone, e.g., at an area where there is a highway overpass and only one of the cross roads is a toll road, is a type of buffer area. In a buffer area, more location information is needed before it is decided whether or not the vehicle is traveling in a toll zone. This excerpt provides an alternate interpretation of a buffer area; col. 3, lines 45-65; col. 4, lines 18-46 – Taking into account Widl's invention as a whole, a toll charge is only applied when it is certain that a vehicle is located in a toll area. Further, dead reckoning is used to estimate the position of a vehicle while the position detection system is temporarily malfunctioning "due to shielding effects or unfavorable satellite position; therefore, Widl's invention teaches the setting of the size of a buffer area based on at least one of a direction in which the moving body is traveling and a distance traveled by the moving body used in the estimated means, i.e., "if the agreement between the position data is sufficiently exact" (col. 3, lines 60-61));

[Claim 20] wherein the generating means generates charge information relating to tolls determined based on a distance traveled in the charge applicable area (col. 5, lines 25-28).

Widl discloses a charging device, comprising:

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[Claim 21] detecting means for detecting position information concerning the moving body (col. 3, lines 14-65);

deciding means for determining a charge applicable area in predetermined map information and for setting a buffer area at a boundary between the charge applicable area and an area other than the charge applicable area or at a position of a moving body detected by the detecting means, and matching the map information with the position information, and deciding an entry state indicating whether or not the moving body has at least entered one of the charge applicable area or the buffer area (col. 2, lines 31-63; col. 4, lines 21-28 – The fact that the vehicle's position is compared to geographical information in a database to determine whether or not the vehicle's location corresponds to a toll zone, i.e., a charge applicable area, signifies that the stored geographical information is equivalent to the claimed predetermined map information; col. 4, lines 18-46 – An area where a toll zone crosses a non-toll zone, e.g., at an area where there is a highway overpass and only one of the cross roads is a toll road, is a type of buffer area. In a buffer area, more location information is needed before it is decided whether or not the vehicle is traveling in a toll zone); and

generating means for generating charge information for the moving body based on a result of a decision by the deciding means (col. 2, lines 59-63; col. 4, lines 18-67; col. 5, lines 25-34);

[Claim 22] adding means for determining a buffer area in which a moving body may be expected to move to from position information indicating position of the detected moving body, by adding a predetermined area to the position information, and wherein

the deciding means uses the buffer area determined by the adding means when the deciding means is deciding the state of entry (col. 3, lines 45-50 – Dead reckoning is a technique for estimating the expected position of a moving body based on a last known position and details of direction and velocity of travel at that last known position. The area of expected movement can be interpreted as a buffer area; col. 4, lines 18-46 – An area where a toll zone crosses a non-toll zone, e.g., at an area where there is a highway overpass and only one of the cross roads is a toll road, is a type of buffer area. In a buffer area, more location information is needed before it is decided whether or not the vehicle is traveling in a toll zone. This excerpt provides an alternate interpretation of a buffer area).

Widl discloses a charging device comprising:

[Claim 33] detecting means for detecting position information specifying the position of a moving body (col. 3, lines 14-65);

deciding means for determining a charge applicable area in predetermined map information and for determining a buffer area at a boundary between the charge applicable area and an area other than the charge applicable area, and matching the map information with the position information, and deciding an entry state indicating whether or not the moving body has at least entered into one of the charge applicable area or the buffer (col. 2, lines 31-63; col. 4, lines 21-28 – The fact that the vehicle's position is compared to geographical information in a database to determine whether or not the vehicle's location corresponds to a toll zone, i.e., a charge applicable area,

signifies that the stored geographical information is equivalent to the claimed predetermined map information; col. 4, lines 18-46 – An area where a toll zone crosses a non-toll zone, e.g., at an area where there is a highway overpass and only one of the cross roads is a toll road, is a type of buffer area. In a buffer area, more location information is needed before it is decided whether or not the vehicle is traveling in a toll zone); and

generating means for generating charging information for the moving body based on a result of a decision by the deciding means (col. 2, lines 59-63; col. 4, lines 18-67; col. 5, lines 25-34), wherein, when a history of the entry state is one in which the moving body moves from the charge applicable area to the buffer area and then back to the same charge applicable area again, generating of charge information relating to an entry into the charge applicable area is prevented so as to prohibit double charging (col. 3, lines 45-65; col. 4, lines 18-46 – When a vehicle enters a buffer area, e.g., an area where toll and non-toll roads cross, the vehicle is assumed to have remained on the toll road the entire time if it moves from the toll area to the buffer area and subsequently back to the same toll area; therefore, no extra entry and exit fees would be charged).

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 4-8, 11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Widl (U.S. Patent No. 5,721,678), as applied to claims 1 and 12 above.

[Claims 4-8, 11] Widl discloses the use of a buffer area to reduce errors in billing tolls (as discussed above). Widl also teaches that different billing conventions may be used to assess tolls. For example, tolls may be charged based on vehicle type, distance traveled in a toll zone or the time of day the vehicle is traveling through the toll zone (col. 4, lines 58-67; col. 5, lines 25-34). However, Widl does not expressly teach the setting of a buffer area between multiple toll areas. Official Notice is taken that it is old and well-known in the art of toll systems that the following toll scenarios exist: adjacent toll areas and a plurality of toll areas that have different toll systems. Since Widl uses buffer areas to help ensure that toll billing is being performed accurately by providing extra verification of a vehicle's route, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to adapt Widl to assess charges among various adjacent toll areas with different toll systems, using a buffer area to separate each of the different toll areas (as per claims 4-6), in order to make Widl's invention more marketable by increasing its usage over a wider collection of toll areas while utilizing a buffer area to help accurately verify a vehicle's position, thereby ensuring accurate billing throughout the various toll areas.

Furthermore, as per claims 7 and 8, Widl discloses that when a vehicle has entered a buffer area, a decision must be made as to whether or not the vehicle is in a toll area. Once such a determination is made, a toll is then assessed if it has been

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decided that the vehicle is traveling along a toll road (col. 4, lines 18-46). This means that the toll for the buffer area is based on the toll of the appropriate toll area. In the modified version of Widl (i.e., where Widl handles multiple, adjacent toll areas), the toll for the buffer area would logically be set to the toll of the toll area in which the vehicle is determined to be traveling. In other words, based on Widl's explicit teachings of setting the toll of the buffer area to that of the adjacent toll area through which a vehicle is traveling, the modified Widl would similarly determine tolls such that a toll for the buffer area is set based on a toll of one of adjacent areas (as per claim 7) or a toll of an area selected from a plurality of areas surrounding the buffer area (as per claim 8).

As per claim 11, Widl teaches the ability to charge tolls based on the distance traveled through a toll zone (col. 5, lines 27-28), yet he does not expressly disclose the charging of a toll based on a distance traveled, wherein this distance bridges a boundary between adjacent areas. However, the modified Widl facilitates toll charges across various toll areas. Furthermore, in light of Widl's disclosure of charging tolls based on distance traveled through a toll zone, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to further modify Widl such that its generating means is provided with storage means for storing a distance traveled in the charge applicable area when the distance traveled bridges a boundary between adjacent areas, and charge information is generated based on the stored distance traveled in order to facilitate such a toll charging procedure (i.e., based on distance traveled) throughout multiple toll areas, thereby

making Widl's invention more marketable by enabling his invention to address the varying needs of multiple toll systems throughout a larger region.

[Claim 13] Widl discloses the use of a rechargeable "highway toll card" for making toll payments (col. 4, line 47 through col. 5, line 24), yet Widl fails to explicitly teach the use of an IC card for making toll payments. However, Official Notice is taken that the use of IC cards to make toll payments is old and well-known in the art of toll processing. IC cards provide for a convenient and secure way of transferring funds, especially in a wireless payment system. Further, IC cards are not as susceptible to damage or fraud as their predecessors, such as magnetic payment cards. Therefore, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to utilize an IC card as Widl's "highway toll card" to store a user's balance information in order to provide for a convenient and secure way of storing and transferring funds wirelessly while minimizing susceptibility to damage or fraudulent accounting activity.

### ***Conclusion***

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susanna M. Diaz whose telephone number is (703) 305-1337. The examiner can normally be reached on Monday-Friday, 9 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (703) 305-9643.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Receptionist whose telephone number is (703)308-1113.

Any response to this action should be mailed to:

**Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450**


or faxed to:

**(703)305-7687** [Official communications; including  
After Final communications labeled  
"Box AF"]

**(703)746-7048** [Informal/Draft communications, labeled  
"PROPOSED" or "DRAFT"]

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Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive, Arlington, VA, 22202, 7<sup>th</sup> floor receptionist.

  
Susanna M. Diaz  
Patent Examiner  
Art Unit 3623  
June 4, 2003

  
**TARIQ R. HAFIZ**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 3600**